

## REMARKS

Claims 10-14 are pending.  
Claims 10-14 are rejected.  
Claims 1-9 and 15-19 are cancelled.  
Claims 20-22 are new.

The amendments to claim 10 include the following features:

The claimed method relates to spatialization of *sound objects*, rather than video objects as in Lin et al. This means that the spatialization is generally not depending on video contents, since sound objects are not necessarily visible video objects, as argued before. Lin et al. refers to video objects and to combined video and sound source data objects (see e.g. para.0016), which require always a visible video object. The present invention is usable for all kinds of sound objects, independent from any video object being visible or not.

Further, the different location parameters for the 2D plane and the depth have been included in the claims.

One issue with the prior art, as mentioned on page 6, lines 4-7, is that conventionally a 2D player is not able to handle 3D vectors, and therefore it cannot handle conventional 3D audio data. Solving this problem, Claim 10 allows for an enhanced player using the invention may decide whether or not to use the additional audio spatialization data. A conventional player will not use these data, but it may spatialize a sound only to the front (see page 5, line 34). In view of this, a step of determining from the *spatialize* parameter that the sound object is to be spatialized has been added to claim 10.

Finally, the previously mentioned x-, y- and z-coordinates have been described as width, height and depth parameters in the amended claims for clarification.

Dependent claim 11 has been clarified.

From amended claim 10, it is clear that the width, height and depth parameters refer to *audio* objects, instead of video objects. The only connection is that the conventional audio width and height parameters of a Sound2D node define a 2D plane that coincides with a (possible) screen plane of a video. This feature remains in dependent claim 12, but has been further clarified via amendment.

Claim 20 specifies that the second node may comprise further data that further define the transforming step. An example is the dimensionMapping field mentioned on page 7, line 29.

Claim 21 specifies that the first node comprises an intensity parameter and a source parameter, as mentioned on page 4, lines 5-30 that the Examiner proposed for narrowing the claims.

Claim 22 defines that a plurality of different audio objects may be included in a scene, where each audio object is separately decoded. This feature is a further difference over Lin et al. ('018).

## **ARGUMENTS**

### ***I. Rejection to Claims 10, 12, and 13 under 35 U.S.C. 102(e)***

The Examiner rejected Claims 10, 12, and 13 under 35 U.S.C. 102(e) as being anticipated by Lin et al. (U.S. Patent 6,829,018, hereafter referred to as 'Lin'). Applicants disagree with this ground of rejection.

In view of the comments made on page 8 of the Final Rejection that the Examiner made in the Final Rejection mailed on January 27, 2010, the Applicants have amended Claim 10 to incorporate the limitation of a sound field. This feature is not described in Lin for the reasons addressed in the Remarks section. Furthermore, the different location parameters for the 2D plane and the depth have been included in the claims.

If these amendments are still not sufficient, the Examiner is encouraged to call the Applicants' representative to address various amendments that can be

made to attempt to capture the allowable subject matter of the Applicants' invention.

For the reasons given above in the Remarks and Argument sections, Applicants assert Claim 10 is patentable over Lin. In addition, Claims 12 and 13 are patentable as such claims dependent on allowable Claim 10.

***II. Rejection to Claims 11 and 14 under 35 U.S.C. 103(a)***

The Examiner rejected Claims 11 and 14 under 35 U.S.C. 103(a) as being anticipated by Lin et al. (U.S. Patent 6,829,018, hereafter referred to as 'Lin') in view of the article by Scheirer et al. ("AudioBIFS: Describing Audio Scenes with MPEG-4 Multimedia Standard). Applicants disagree with this ground of rejection.

Applicants assert that Claims 11 and 14 are patentable as such claims depend on allowable Claim 10.

In view of the presented amendments, Applicants assert that the presented claims are patentable over the cited art of record.

Having fully addressed the Examiner's rejections it is believed that, in view of the preceding amendments and remarks, this application is in condition for allowance. Accordingly, reconsideration and allowance are respectfully solicited. If, however, the Examiner is of the opinion that such action cannot be taken, the Examiner is invited to contact the Applicant's attorney at (609) 734-6809, so that a mutually convenient date and time for a telephonic interview may be scheduled.

Respectfully submitted,

/Joel M. Fogelson/

By: Joel M. Fogelson  
Reg. No. 43, 613  
Phone (609) 734-6809

Patent Operations  
Thomson Licensing Inc.

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Customer # 24498

P.O. Box 5312  
Princeton, New Jersey 08543-5312  
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